

REMARKS/ARGUMENTS

This is a further response to the Official Action of September 7, 2006.

If any fees are necessary, please charge to our Deposit Account No. 50-3108. If for any reason there are insufficient funds in the Deposit Account, please charge to Deposit Account No. 10-0100.

Applicant also asks that the remarks previously submitted be incorporated herein, even though some have been rejected for the sake of completeness.

For the sake of the record, it is noted that the last claim noted by the Examiner is claim 45, and this appears to confirm that the paper filed September 5, 2006, was not entered, and therefore the new claims commence with claim 46. All previous claims not allowed have been cancelled, but the claims which the Examiner considered to contain allowable subject matter have been retained. The claims now in this Application are claims 33-35, 44, 45 and claims 46 to 59, and new claims 61 and 64 to 66. To avoid numerous amendments, new claim 64 was derived from previous claim 60, new claim 61 was derived from undesignated claim 61 previously submitted with paper electronically filed on 08-Jan-2007, new claim 65 was derived from previous claim 62, and new claim 66 was derived from previous claim 63.

Based on an interview held with the Examiner before filing this Application as a Request for Continued Examination (RCE), an interview was held with the inventor and the undersigned attorney and, it is noted for the record, it is the inventor's and the undersigned attorney's understanding that the Examiner was willing to allow claims because the prior art references do not teach a cooling chamber having a uniform thickness with the mold walls and that the chamber conforms to the shape of the mold.

Further, it is noted that another argument and position was submitted specifically noting that the prior art teaches away from the invention by specifically teaching bored holes within the mold walls.

Specifically, Applicant's attorney wishes to note for the record that the Examiner was very helpful at the interview and, based on the points raised by the Examiner, further thought was given to this subject matter by the inventor's Australian attorney who drafted this Application and had a very good understanding of the subject matter as initially filed and is fully conversant with the language used in the specification, as well as in the claims. Based on further study, it was decided to submit a new set of claims, while retaining the allowed claims of the parent application in this Application to place such claims into the form as originally filed in which context they were allowed by the Examiner previously for the sake of maintaining claim which the Examiner considered to be allowable prior to the interview, and the Applicant, again for the sake of the record, thanks the Examiner for understanding that the subject matter of this Application contains allowable matter. Also, Applicant reserves the right to amend the allowed claims based on the Examiner's consideration of the new claims.

As noted heretofore, Applicant gave further consideration to this matter after the interview, and this is the reason new claims were added previously and at this time.

Therefore, for the sake of the record, it is desired to bring this additional information to the attention of the Examiner. One of the main differences between the prior art and the present invention is that the present invention proposes filling totally a cooling chamber in a mold with the one fluid which has both a liquid portion and a vapor portion. This then means as a direct consequence that if a wall dividing the molding chamber from the cooling chamber is arranged to affect some uniformity of heat transfer from one side to the other side then the uniformity of temperature on the cooling chamber side will be reflected in uniformity of temperature across the wall on the molding chamber side.

It is for this reason that Applicant proposed presenting and filing a claim without the specific limitation of the uniform wall thickness. The distinguishing aspect is the fact that there can now be a much improved cooling system which provides a vastly improved cooling system with improved mold life and even without uniformity of the wall

thickness a temperature distribution which can be of major advantage even if in some cases the wall thickness for reasons say of strength may not be substantially uniform. The distinguishing aspect is that the closed chamber is filled with a selected fluid having both phases present and there is a condenser in the chamber.

With respect to terminology used in the claims, it should be noted that the use of the word “assist” in line 2 of new claim 46, previously presented, for example, softens the original because no system, method or apparatus such as disclosed in the present Application will affect substantial uniformity through the whole mold which is inevitably split. The word or term “filling” after selected fluid, in line 4 of previously presented claim 46, for example, is critical and means that other materials are specifically excluded. This claim 46, as well as the other new independent claims, is a break down from the original claims and is derived from the discussions held with the Examiner.

For the sake of the record, in all of the claims, the term “fluid” applies to both the liquid phase and the vapor phase and the purpose is to clearly differentiate between the liquid and vapor portions of the single quantity of fluid.

Also, the two functions of the system and method have been further clarifying which are firstly to maintain a **uniform temperature** across all surfaces of the chamber and secondly to maintain a **constant temperature** within the chamber.

With respect to currently amended claim 59, this claim was changed from previously presented claim 59 to remove the air as the only fluid in the chamber is that which fills the chamber. This implicitly means that the “pressure” in the chamber is the vapor pressure of the fluid. This pressure cannot be selected as such because it is implicit from the fluid selected. “Selection” is the choice of fluid.

With respect to the prior art cited by the Examiner, it is respectfully submitted that all of the claims now presented are allowable and patentable over all known prior art for the reasons previously submitted, as well as the new arguments presented above.


Since the Examiner has been very helpful, the Examiner is respectfully asked to call Applicant's attorney to take care of any outstanding matter and to do what is necessary to place the Application into condition for allowance.

Early and favorable reconsideration is respectfully solicited.

Respectfully submitted,

LACKENBACH SIEGEL, LLP
Attorneys for Applicant(s)

By:


J. Harold Nissen
Reg. No. 17283
Telephone No.: 914-723-4300
Direct No.: 914-723-0278
Fax No.: 914-723-4301

LACKENBACH SIEGEL, LLP
1 Chase Road
Scarsdale, NY 10583
Telephone: 914-723-4300
Fax: 914-723-4301